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Original Communications.

TWO CASES OF DOUBLE SPONTANEOUS DISLOCATION OF THE LENS.

By HENRY W. WILLIAMS, A.M., M.D., Boston, President of the American Ophthalmological Society.

On July 13th, 1869, I saw Mr. M., a healthy man of 35, who gave me the following history:—

At about 18 years of age he was told that his iris quivered in both eyes; and this he had himself been able to observe on looking in a mirror. Probably the suspensory attachments of the crystalline were even then relaxed or separated to a greater or less extent.

About a year and a half since, the lens of the right eye passed through the pupil into the anterior chamber, and this phenomenon has been repeated, at intervals varying from two or three weeks to as many months; always occurring when he stooped or made an effort in lifting. Usually, he has been able to replace the lens by shutting himself for a few moments in a dark closet. The displacement has not generally been accompanied with pain.

He has noticed that when he leaned his head towards the right he saw better, when towards the left he scarcely saw at all with this eye. He wears No. 6 concave glasses, and with these reads No. xxx. of test types at ten feet distance with his left eye. Vision good for reading with this eye.

Four days before I saw him, the right lens became displaced into the anterior chamber, and has remained there, giving him a dull pain in the globe, and causing very slight injection. It appears like a large drop of oil between the cornea and the iris. The pupil is considerably dilated, and the iris is distended by the over-lying lens.

He was placed upon his back in a dark room, and the cornea was gently rubbed with the upper lid, until, after a few minutes, the lens slipped back into the posterior chamber. When his head was upright the lens now covered the inner half of the

field of the pupil; when the head was leaned towards the right shoulder nearly the whole field of the much dilated pupil was covered by the lens; but when it leaned towards the left shoulder the margin only of the lens was visible at the inner edge of the pupil. Evidently the displacement was lateral, without any tilting backwards.

When the lens was nearest its normal position he saw, with his No. 6 concave glass, nearly as well as with the other eye; when it was laterally displaced he saw best with No. 6 convex.

On examination with the ophthalmoscope the fundus of both eyes seemed normal. The iris was tremulous in the left eye, and there can be no doubt that in this eye also the attachments of the suspensory ligament have given way to some extent; but as the pupil in this eye was contracted, as a consequence of the large dilatation in the right eye, it was not possible to determine how much dislocation of the lens existed unless after artificial enlargement of the pupil, to which it was not desirable to resort lest anterior displacement might perhaps occur in this eye.

Three large doses of extract of calabar bean were put into the right eye; producing, at the end of an hour, an evident though but slight diminution in the size of the pupil. This proved, however, insufficient to prevent the lens from again falling into the anterior chamber on his making a slight movement forward. It was again replaced, by friction upon the cornea, and he was kept on his back, but not in the dark, for some time longer. But even the slight effort of rising from his chair, without any perceptible forward movement of the head, sufficed to again propel the lens through the pupil. It is not unlikely that some accommodative effort of the eye may have had an agency in the displacement.

Replacement being once more effected, he was dismissed with directions to put a square of calabar gelatine into the eye every hour, in the hope that sufficient contraction of the pupil might be induced to form a permanent barrier to the escape of the lens into the anterior chamber.

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The next day the friend who accompanied him reported to me that the lens had been several times displaced. He was advised to remain quiet during the day and to continue the calabar, and, if necessary, to report to me the next morning before setting out for his home.

He was also cautioned that he must avoid sudden exertion, lifting, &c.; since he might thus dislocate one or both lenses.

Nov. 11th, 1869.—A boy of about 12 years of age was brought to the Ophthalmic Clinique at the City Hospital, both of whose eyes exhibited partial lateral displacement and slight opacity of the crystalline. His mother was sure he had not good vision; but its exact amount could not readily be ascertained on account of the mental imbecility of the patient.

December, 1869.

CASE OF ABSCESS OF THE LIVER,

Discharging Sero-purulent Matter and numerous supposed Biliary Calculi from an Opening in the Hollow of the Umbilicus, and continuing nearly a Year.

By GEORGE W. DOANE, M.D., Hyannis, Mass.

Mrs. C., of this vicinity, aged 80 years last June, while visiting her daughter in Boston, was seized about the first of December, 1868, with severe pain in the right side over the liver, which continued about three weeks and then subsided, so that she was comfortable and about house. In about two weeks after, discovered quite a sized tumor over the region of the gall-bladder, as nearly as they can describe it to me, which was not painful in the least on pressure, and which gradually commenced to settle down until it reached the hollow of the umbilicus, when it became purple, and broke, after being poulticed a few days, about the first of March, and soon discharged the first calculus. It continued to discharge one or two at a time every two or three days up to the 23d of October, when, after experiencing quite severe pain for three days, eight calculi were discharged at one time, and no more have appeared since. The calculi are about the size of common peas—some larger and some smaller—of irregular shape, generally approaching the form of a square; some lighter and some heavier than water, of a resinous, oleaginous appearance, of dark-yellow color, and not looking like those that I have seen passed by the natural channels of the body. The friends judge that as many as a

hundred of these bodies must have been discharged since last March.

The query in this case is, where do these bodies come from. The gall-bladder I have always supposed to be the only place where biliary calculi are formed, and if so, why is not the bile also discharged along with the calculi in this case; or are these concretions, lumps of inspissated bile from some other part of the liver? I can find but few cases on record of calculi being discharged from the side, and none of these state whether bile accompanied the discharge or not. A chemical analysis might probably show their composition and origin; and such concretions, perhaps, may form in the tubuli of the liver.

A few more particulars in the history of this case may not be uninteresting. Mrs. C. is not what would be called of a bilious temperament, and has always lived in a dry, sandy place—the last place to engender any disposition to diseases of the liver—and has lived an active, temperate life in every sense of the term. Perfectly healthy, except having a severe cough ever since she was 18 or 20 years of age; several times in her life so severe that her physician thought she could not live. This cough was always considered to be confined to the lungs entirely, but I am induced to think, from its spasmodic character, has been caused by a diseased liver, creating irritation and spasmodic action of the diaphragm, aggravated at times by colds. For the last six or seven years she has been troubled with a burning sensation over the lower part of the right side, and for about the same length of time her urine has been thick and very fetid, showing that the kidneys were carrying on a vicarious elimination of the effete matters from the body. All this burning sensation of the right side has subsided since the discharge has taken place.

She was under a homœopathic physician while in Boston, and I have no account of the case, except from friends, until I saw her soon after her return home in the early spring. She was then comfortable, and up most of the day. Appetite good. Bowels perfectly regular, and stools natural in color. Slept well and had no pain. I recommended non-interference with the abscess; but as the continued discharge seemed to tell on her system, I advised a plain, nutritious diet, with wine three or four times a day, which has been continued ever since. She has been comfortable through the summer, except for about two or three weeks in September, when she lost

her appetite, and her stools became clay-colored. She soon, however, came round right in her stomach and bowels, but has gradually failed in her general strength, and now sits up only three or four hours a day; she is very comfortable every way except the annoyance of her cough. The opening of the abscess is quite healthy, with a slight fungus around it, and an ordinary sized female catheter can be passed without force upwards and to the right about three inches.

[At the request of Dr. Doane, the calculi were sent for analysis to Dr. White, who has kindly sent us the following statement.]

"The specimens you gave me for analysis are what they seem to be—biliary concretions composed of cholesterin and bile pigment. Their laminated structure is the same as is seen in ordinary gall-stone. In the only case of a similar discharge of these bodies through the abdominal wall that I have seen there was, as in this, no escape of fluid bile. JAMES C. WHITE.

"Boston, December 8, 1869."

A CASE OF REMARKABLE ENDURANCE.

Reported by JOHN F. BUTLER, M.D., Chesterfield Factory, N. H.

Mrs. J. W., aged about 34, native of Ireland and the mother of several children, has always enjoyed robust health, with the exception of occasional attacks of epilepsy, until about two years since, when pregnant—some two months prior to confinement—she became violently insane. This attack was recovered from at confinement.

At noon of Oct. 22d, 1869, I was called to visit her, and found her again pregnant, at about seven months. She could, or would give no exact data, and a digital examination was not obtained. She was again insane, but not wildly so, and complained of nothing, yet evidently had slight uterine pains.

Oct. 23d.—Saw her again. She was at a neighbor's house and intensely wild. During the night previous she attempted to kill her husband and children. I gave her an anodyne, and left her, with general directions for her management.

About daylight the next morning she entered a former neighbor's house some one and a half miles from her residence. She was wet to the skin, perfectly drenched, cold and shivering, and smeared with blood. The lady upon whom she called immediately changed her clothing, gave her hot drinks, and despatched a messenger for me. I

found her lying on a lounge; but on perceiving me she rose and sat up. From her I learned she left home about three or four o'clock, P.M., the day previous, and started across Pistareen mountain to go to her father's. The region will vie in ruggedness with the White Mountains. She wandered about till dark, when, exhausted, she "laid down between two rocks" and gave birth to a pair of twins. Thinly clad, she shivered out the night, and at dawn travelled on again, and arrived where I found her between five and six o'clock, A.M., Oct. 24th. She was calm, pulse 70, and in no wise worse off than most women after confinement under the most favorable circumstances.

Oct. 25th.—Pulse 62. Appetite good, and perfectly comfortable.

Oct. 28th.—Rode home, sitting up in a common buggy.

That a woman could undergo the pains and perils of childbirth alone, lost and half clad, on a bleak mountain and during one of the most violent rainstorms of this inclement season of the year, and not receive detriment therefrom, seems marvellous.

Sed sic est.

Oct. 30, 1869.

Selected Papers.

IMPORTANCE OF A THOROUGH MEDICAL EDUCATION.

From the excellent Introductory Address of Prof. R. M. Hodges to the Medical Class of Harvard University, we take the following extracts:—

The plan of a thorough medical education compels the student to fathom a multitude of subjects, and the question will naturally be asked, why Surgery should be so much more prominent than many other departments of study, operations in private practice being of comparatively rare occurrence, and many physicians feeling no inclination to undertake them.

The indispensable, but purely technical, art of operative surgery separates medical from surgical diseases; but this arbitrary division does not extend to pathology, which is, so to speak, one and indivisible; and the fact that surgery deals with external diseases, visible to the eye and accessible to the touch, makes it an invaluable field in which to study, not merely the elements or certain isolated fragments of pathological inquiry, but almost its entire range.

The hidden phenomena of an inflamed lung are rendered visible in the development and progress of an ophthalmia; a fracture of the neck of the thigh-bone in old age, and the rupture of a fatty heart, can be made mutually to explain each other. It is this distinguishing feature of an external pathology, by which the whole science is irradiated, and not what it accomplishes in the treatment of diseases, or the methods adopted for their cure, which makes surgery so conspicuous in the list of medical studies.

In the early part of the present century surgery received an impetus in France, at that time the unquestioned centre of its cultivation, from three eminent men who adorned her capital:—Bichat, the first physiological anatomist; Boyer, who gave to surgery precision and an exact anatomical classification; and Dupuytren, who consummated its alliance with pathology. The surgeons of an earlier period desired to know little beyond anatomy and mechanics; they made scarcely any application of physiological principles, and encouraged no therapeutics except mechanical and instrumental interference. The lessons and the practice of the famous teachers just named, so far in advance of what had previously prevailed, first lifted surgery from a mere handicraft to the loftier position of a systematized and liberal branch of knowledge. The traditional method of studying the dead body became inadequate even for practical uses; and as medicine scarcely acknowledged indebtedness to anatomy, or claimed proficiency in anything except the recognition of symptoms, it was from a surgical point of view solely that the demand came for a new and more comprehensive system of investigation. To the illustrious Velpéau, whose death has but recently occurred, we owe the first attempts at making Human Anatomy an applied science. But forty years have elapsed since the work of that celebrated surgeon was published, yet the changes are already so great, that, in the most modern development of the science, a treatise on Medico-Chirurgical Anatomy blends with the description of normal and pathological tissues the truths of physiology and the facts of clinical observation, while the mere relations of parts fill a position of only subordinate interest. And even the Microscope, which has done so much to unite the sciences of pathology and physiology, is no longer the only interpreter of their intricacies. A conviction that the true nature of morbid growths must be sought in development, rather than structure, suggests fresh fields of inquiry; and

chemistry, the effect of the electric current on protoplasmic structures, the spectrum, which is already applied to the blood in the analyses of toxicology, or still newer methods of exploration, may yet accomplish that which the best lenses have been unable to achieve.

It has justly been remarked, "that each grand epoch in the art of medicine has derived its impulse from a new anatomy, originating a higher physiology and theory of disease." The rude anatomy of animals, which Galen applied to man, revolutionized the deeper empiricism which preceded him. Vesalius, the first to make human dissections, whose only subjects were the putrefying remains of half-buried bodies, which he rescued from the dogs who unearthed them in the cemeteries, was arraigned by the Inquisition for his heretical utterance, that the descriptions of Galen did not apply to man, or accord with the results of dissections. The King of Spain commuted his sentence to an expiatory voyage to the Holy Land; and though he perished by shipwreck on his way home, the light of his anatomical studies illumined the whole of Europe. The discovery of the circulation by Harvey—the important difference between the two roots of the spinal nerves, which was determined by Sir Charles Bell—the phenomena of reflex action pointed out by Dr. Marshall Hall—the researches of Schwann and Schleiden on the development of tissues—each gave a special impulse to medical science. Virchow, by his generalizations of the anatomical knowledge which the microscope for twenty years has been revealing, furnished a new interpretation to the processes of nutrition; and his studies of the connective tissue have given birth to a pathology, which, though it has been greatly criticized, is now almost universally adopted.

The origin and growth of the science of Pathology cover a period of hardly half a century, yet its history serves to show that the medical student must not be content with a knowledge of any single department of anatomy, but that to be a pathologist, or, in other words, a real physician, he must be master of it in its descriptive, topographical, and physiological, as well as morbid aspects.

The complex laws of the human economy are beyond the grasp of one man's term of life; yet the subdivision of their study is admissible only to a degree consistent with a comprehensive acquaintance with the principles on which they are founded. The authors of special researches which have

given an impulse to medical knowledge have been, almost without exception, general pathologists, familiar with every term in the series of morbid phenomena, and recognizing their mutual dependence. Although the unarranged elements of Mr. Goodair's remarkable memoir on the development of the teeth existed in his mind when he was practising dentistry, they were only fully verified and unfolded by his maturer investigations after he entered upon the general practice of medicine and surgery. Their amplification by the light of physiology and pathology gave a practical character to his researches, and his paper is still counted as among the most famous in the archives of anatomy.

Comprehensive proficiency was an element of Hunter's great success. He devoted ten years to the study of human anatomy. What he could not find there he sought in comparative anatomy. That which the dead body did not reveal he sought for in the living animal. Anatomy, experimental physiology, clinical observation, and pathology, were each made the coadjutor of the others. We do not realize how much of surgical science is due to this great observer. The later use of the microscope has made the discoveries of which he was the pioneer such common property that it seems as if they must always have been known; for it is scarcely to be credited that they date back only to a period which is almost within the memory of some in this audience.

The generalizations which experience tends to establish lead to the conclusion that morbid phenomena are not ordinarily due to causes of local origin, but that they consist chiefly in a modification, either qualitative or quantitative, of the normal functions, or of the growth and nutrition of the body. A right comprehension of disease involves, therefore, as a fundamental principle of modern medicine, the idea, that, if one member suffers, the others suffer likewise.

There can be, consequently, no partial or divided acquisition of our profession; and yet young men, while still engaged in their preparatory training, are sometimes led to devote exclusive attention either to medicine or to surgery. Fascinated by the spectacle of surgical operations, or by the skill of the operator, and impressed with the magnitude of the results produced, some among them are induced to slight medical studies, and to overestimate the significance of procedures which constitute but a single

item in the accomplishments of a surgeon, and really require but little intelligence for their performance. The most famous teacher of Operative Surgery in Paris, when I was a student, the elegance and dexterity of whose demonstrations attracted even Hospital Surgeons into the circle which crowded around him, had never been able to acquire enough medical knowledge to graduate in medicine, although he had twice been before the Faculty.

On the other hand, the thoughtful procedures of etiology and diagnosis, which are the peculiar triumphs of medicine, excite an interest in certain zealous students, who are so charmed by the varying modifications of pathological action that they disregard the opportunities for instruction in surgery, or inadequately master anatomy, and are hence incompetent in practice to render the first services in cases of accident or sudden surgical emergency.

The degree of *Medicine Doctor* requires an acquaintance with all the separate and special points of professional study, and it is a mercantile rather than a scientific spirit which attempts to apply to medicine the division of labor approved in industrial pursuits. The distinguishing feature of modern surgery, says one of its most learned interpreters, is the endeavor to unite in itself the whole of medical knowledge. No narrow proficiency or shallow sciolism can ever reach the culminating pinnacle which crowns the medical fabric.

The study of Pathology is of such exhaustless range, its pursuit occupies so much time and demands a knowledge of so many special subjects, that it is difficult for physicians engaged in active practice to follow its investigations in all their detail, except at second hand, through the medium of books, or of specimens preserved and prepared in such a way as to be accessible for examination.

The collection of preparations is one of the great agencies by which science, in all its departments, is advanced. If facts and phenomena which seem at the moment utterly incomprehensible are still kept in sight, they often subsequently prove at least partial interpreters of truths sought, the inferences of to-day becoming the demonstrations of to-morrow. A well-ordered museum is an instrumentality always at hand and available, by which ideas are profoundly fixed in the memory, through a direct appeal to the senses.

The greatest men of our profession have felt that they could in no way advance its

interests more effectually than by devoting a part of their energies to the formation of such collections.

It was not to immortalize his name, or merely to fill up the spare hours of youthful leisure, but with an ever-present consciousness that he was sacrificing to his chosen studies the emoluments of a lucrative and much needed practice, that John Hunter devoted himself to the labors which first gave to pathology the form and character of a science. "It was amid the jeers of the medical market-place" that he toilsomely accumulated the invaluable specimens which form an important part of that magnificent Hunterian Museum, now universally considered "the greatest of English contributions to the science which it illustrates."

William Hunter, who is acknowledged to have given to the study of obstetrics its modern impulse, who was the teacher of Matthew Baillie in morbid anatomy, and of his brother John in surgery, also left a museum of his own collecting, which at his death was valued at twenty thousand pounds. The greater part of it is now in the possession of the University of Glasgow, to which he bequeathed it, and it still subserves the uses for which it was destined.

Dupuytren, whose famed clinical instruction did so much to popularize the study of pathology, was prevented only by his sudden death from making provision in his will for the erection of a pathological museum. With his dying breath he enjoined it upon his friend Orfila to carry out his design. The superb museum which is now one of the glories of the medical school of Paris bears upon its front the inscription, that it was erected in 1835, "at the expense of the Government, through the efforts of Orfila, Dean of the Medical Faculty of Paris, and named the Dupuytren Museum, in honor of the memory of a great man, and in grateful recognition of a legacy of two hundred thousand francs bequeathed by that professor for the endowment of a chair of Pathological Anatomy."

The late Dr. John C. Warren presented to this institution, together with a sum of money for its increase, the nucleus of a museum, which by constant accessions has now become one of the richest in the country. To the untiring zeal of the Professor of Pathological Anatomy in this University Boston is mainly indebted for two invaluable collections, the museum just named, and that of the Boston Society for Medical Improvement. Their union would be little

more than a just acknowledgment of his lifelong devotion to the study and teaching of pathology. Gathered into one repository, they would be a superb illustration of what may be accomplished by a single individual, and might transmit to posterity, in connection with a name which has been honored in this community through five generations, a legacy which time alone is able to amass, and from which science and education would derive unfailing returns.

The attractions of surgery to medical students have been already alluded to. It cannot be denied that its fascinations are largely due to the excitement of witnessing operations, and to the brilliant manner in which they are often performed. But as it is not the whole of medicine to give physic, so it is not the whole of surgery to practise operations. Our own time has witnessed the birth of a conservatism which teaches us not only to avoid them, but to limit the extent of mutilation when they are rendered imperative; it has also signalized the preventive efficacy of a good hygiene, and of patience on the part of the surgeon not less than on that of the sufferer. In the hospital for the disabled veterans of the French army there are found three who have recovered from gun-shot fractures of the thigh for one who has survived its amputation, and it was a remark of Velpeau that the older he grew the less he amputated. Much of that habit of interference which was once the chief characteristic of surgery has been abandoned. Its meddlesome dressings and harassing apparatus have gone out of use, or have been so simplified that we can with difficulty understand some of the paraphernalia described by authors whose writings are still current.

Although erudition, experience, acute observation, and exactitude are qualifications demanded in solving the enigmas of surgical diagnosis, the exigencies of surgical therapeutics are not less comprehensive. Besides these attributes of intellect there are others of temperament and character which must be superadded to the technical gifts of delicacy and decision of touch. Self-possession, in-born or acquired, is an indispensable trait, but there is nothing to commend in the boldness often so highly esteemed. It is no credit to the surgeon that he can trifle with the life of his patient in performing with insufficient reason, no matter under what importunities, an operation almost certain to be fatal—or if, tempted by the charm of its difficulties, he cannot reply to the questionings

of conscience, that he does only to others what he would have others do to him. * * *

Influenced by the unexpected developments of science, which have thrown light upon the treatment of disease, and informed us better and more surely as to the object and competency of our efforts, medicine has made a progress in recent years which is rivalled by scarcely any other avocation. The most eminent lawyers and divines are perhaps wiser than their distinguished predecessors; but the existing race of physicians is certainly far above that which went before it. To this general advancement our Medical School has contributed an influence by no means inconsiderable, or limited to the Commonwealth with whose name it is identified.

In this day of its prosperity, one cannot but look back and contemplate with feeling the painful sense which the brothers Hersey, the first benefactors of the medical department of the University, must have entertained of the deficiencies of their own penurious education, when they devoted so liberal a share of their hard earned fortunes to the foundation of two of its still existing professorships, that they might avert from those who should come after them the bitter perplexities of uncertain and imperfect knowledge, which so often kept them company as they floundered through the winter snows or toiled in summer heats along the sands of Cape Cod, in the solitary rides of a practice which is said to have extended from Hingham to Provincetown.

Medical science is so sedulously cultivated by all civilized nations that no particular country can claim to stand at the head of this branch of learning. France once did, but she has been reluctantly driven to concede that science cannot be isolated, or kept exclusively within the limits of any realm. The dynamic forces of constant interchange of ideas and concert of action in research have accelerated its advancement in all quarters of the globe. National authorities, as well as individuals, have contributed liberally to its promotion.

Our own government did not forget the opportunity afforded by the recent conflict to construct a National Museum of military medicine and surgery, which has been pronounced as, "beyond all doubt, the most curious, the most instructive, and the most complete in the world"; nor did it neglect to turn its misfortunes to a good use in the investigation of important professional subjects on a larger scale than had previously been possible. The elegantly illustrated Circulars in which the results of these ex-

haustive researches are promulgated have been distributed both at home and abroad with great liberality. Although American authorities have long been quoted with respect in the various departments of medical learning, these elaborate papers can hardly fail to enhance the interest with which a knowledge of opinion in this country is already sought.

Reports of Medical Societies.

THE NEW MEDICAL SOCIETY, WASHINGTON, D. C.

THE second meeting of the new Medical Society was held on Thursday evening, Dec. 28d, Dr. Robert Reyburn, the President, in the chair, and Dr. Gray Secretary.

Dr. Loomis thought there should be a constitution adopted by the Society, as in their present status any one had the right to take part in the transactions of the meeting, whether regular physicians or not. The homeopathic practitioner could come here as well as others and take part in the proceedings, when there could be no affiliation with them professionally.

Dr. Stephenson, from the Committee on Constitution, submitted a report, which was read, and afterwards taken up and considered, section by section. It provides that the name of the association shall be "The National Medical Society of the District of Columbia;" the objects of the Society to be the protection of its members who have diplomas as doctors of medicine; the time of meeting to be on the fourth Tuesday in each month; the delegates to the American Medical Association to be elected at the monthly meeting in March.

On the question of admitting all resident physicians who can show the requisite diplomas, Dr. Southworth moved that no person shall be admitted as a member who advertises further than his name, residence and office, which was laid over for the time.

Dr. Stephenson stated that the Committee on Credentials would make admission a personal matter as a rule.

Dr. J. Edwin Mason called the attention of the Association to the fact that the American Medical Association, at the meeting in this city, in 1868, had decided not to recognize females or colored men as members.

Dr. Loomis stated that the Association in question had generally made regulations to

suit the locality in which they met, and he recommended that if this society adopt their code of ethics, it be with the understanding that they reject so much of it as conflicts with the constitution of this society.

Dr. Mason said he had been assured that no bill could pass Congress, granting them a charter, unless it gave the privilege to the female sex of studying and practising the science of medicine. After considerable discussion, it was finally decided to adopt that section of the constitution giving the right to females and colored persons. The fee for admission was fixed at \$5, and an annual assessment on each member not to exceed \$10, was agreed upon.

On the question of adopting a code of ethics used by the American Medical Society, Dr. Loomis moved to amend so that it might not conflict with the constitution of this society, which was discussed at considerable length, and afterwards rejected.

Dr. Stevenson moved that a committee of three be appointed on ethics, and that this subject be referred to it for consideration, and to report at the next meeting of the society; which was agreed to, and the chair appointed Doctors Newman, Johnson and Tucker the committee.

The constitution was discussed at some length, and after it had been considered section by section, it was agreed to refer it back to the committee to be engrossed after verbal corrections.

Dr. Southworth asked to be informed as to the mode of advertising, as some were under the impression that they could advertise as they pleased.

This matter was left for the management of the Committee on Credentials and Ethics. The Society adjourned to meet on Tuesday evening, Dec. 28th.

Bibliographical Notices.

Percussion and Auscultation as Diagnostic Aids. A Manual for Students and Practitioners of Medicine. By Dr. CARL HORFF, Assistant Physician to the Sixth Westphalian Regiment of Infantry. Translated by L. C. LANE, M.D. Philadelphia: J. B. Lippincott & Co. 1869. 12mo. Pp. 152.

In the preface of this little book the author says, "It cannot be denied that auscultation and percussion have long failed to serve their proper purpose." With this

most of our readers will readily agree. It is well known that comparatively few physicians in private practice have even a tolerably good knowledge of auscultation and percussion. This is, we think, not generally on account of "want of leisure to study comprehensive works on this subject," but is due to a want of system in the instruction given to the student, and to the same want of system in most text books. We recognize the phenomena obtained by auscultation and percussion in the same way as we recognize musical sounds, and they should be studied in the same way. We can by repeatedly playing a certain combination of notes so impress it upon the mind of a listener, that he will after a while remember it; or, in other words, know the tune. But if we give him the score, the intensity, pitch, quality and duration of each note, he will be able to reproduce it at any time with absolute certainty. In the same way we may ask a student to listen to a physical sign within the chest, e. g. bronchial respiration. He may remember its characters so as to be able to recognize it at a future time, but it will probably be necessary for him to listen many times before he would feel confidence in his ability to do so. But if in this case we direct his attention to the combination of pitch and quality in inspiration, with duration, pitch and quality in expiration, and tell him that these denote bronchial respiration, and never denote anything else, we give him a key which will always be available, and which he can apply with certainty years after he has heard the sign.

Auscultation and percussion have usually been acquired in the former way, i. e. by rote, but now they are beginning to be taught in the latter. Most of the sounds derivable from auscultation and percussion can be so analyzed with reference to their intensity, pitch, quality and duration, that so long as the student remembers the analysis he will not be in doubt with regard to the character of thoracic signs. A physician can, after much clinical experience (and most of our hospital physicians do so), learn by rote the thoracic signs. Physicians in private practice have not the "material" to enable them to do this. Fortunately our teachers are now beginning to appreciate that sound produced within the chest should be studied in exactly the same way as sound produced anywhere else, and the proficiency which students quickly attain by this method is proof of its worth. It is sometimes objected that such a system is not generally available, because those unacquainted with

music cannot appreciate variations in pitch, &c., but it is the experience of those who have given such instruction that with good attention almost any ear soon becomes sufficiently educated to use these tests.

In the book before us this method is applied particularly to percussion, and the book would have been more complete if it had been applied also to auscultatory sounds.

About forty pages are given to the subject of percussion. After speaking briefly of the manner of making percussion, the regions of the chest, and the different theories of the origin of sound produced by percussion, the author proceeds to speak of the *phenomena peculiar to the sound produced by percussion*. He says the sound may vary according to its (1) intensity, (2) highness or acuteness (*i. e.* pitch), (3) timbre or quality, (4) duration. He then considers the conditions which may influence sound in each of these particulars. A chapter each is given to intensity, pitch and quality, but he says so little difference in the duration of sound within the body is perceptible, that it is better not to take this property into consideration.

The scientific way in which the subject is treated may be judged from the following example. "There are fewer conditions or qualifications in the height of the sound than in its intensity. (1) The smaller the vibrating mass that is the volume of the air-containing parenchyma, the higher is the sound; the greater the mass, the deeper the sound. * * * (2) The degree of tension of the parenchyma of the lungs, or the walls containing the air. The greater this tension, the higher is the sound; the less the tension, the deeper is the sound. * * * The lower parts [in pleuritic exudation] contain no air, the upper parts but little. In this condition the sound from below the clavicle of the affected side, which was at first loud, deep and tympanitic, is rendered dull in a downward and lateral direction. The question arises, whence this depth of sound? On the affected side the volume and tension of the lung have decreased. Diminution of the volume increases the height of the sound, diminution of tension increases the depth of the sound. Since it is deeper now the diminution in tension must be the greater. The longer the sound wave the deeper the note produced. The longer the sound wave the less frequently are its vibrations repeated in a second, and consequently the smaller is the number of vibrations. The number of vibrations, or the height of the sound, is equal

to the tension divided by the volume, or $h = \frac{t}{v}$. If the diminution in volume is greater than the diminution in tension, the sound becomes higher. This finally occurs where the exudation increases. Then the sound underneath the clavicle of the affected side is higher."

This statement will be objected to by those who have been taught that tympanitic resonance is always high in pitch, yet we believe that clinical experience will bear out the author. Objection will certainly be made to the statement that "in pneumothorax the sound on the affected side is *tympanitic and deep*," on account of the length of the vibrating column of air, but we must remember that our cases of pneumothorax are usually complicated by a pleuritic effusion, which would of course affect the results of percussion. In the only case which we have ever seen of pneumothorax uncomplicated, throughout its course, by liquid effusion, we were particularly struck by the low pitch of the percussion note.

In Chapter III. the Timbre or Quality of Sound is discussed under two heads, the (A) Tympanitic, and (B) Metallic; and at the end of this chapter is a section on the Relations of Percussion to the Normal Thorax, and one on Pectoral Fremitus. In speaking of the Tympanitic Timbre the author says, "The difference between intensity and highness is most readily to be distinguished in this sound." We do not understand how there can ever be any possibility of confounding characteristics of sound totally different in their nature. The author dwells upon one fact in regard to tympanitic sound which perhaps we do not sufficiently consider in practice, and that is that where there is very great distention of the walls of the cavity, whatever it may be, the tympanitic sound is liable to be lost entirely. A clear distinction is not made between the Tympanitic and Metallic Timbres, both being described as ringing sounds. In speaking of that variety of the tympanitic known as the cracked metal sound, the author says, "For the production of this sound, it is also necessary that the thoracic wall be thin and yielding, the cavern *tolerably large*, and situated superficially, and in free communication with the bronchus. Of course these conditions are fulfilled in the case of the *smallest caverns*," which is not very intelligible.

It is noticeable that in this chapter on Timbre nothing is said about that peculiar quality of resonance which we get by percussing over healthy lung tissue. This we consider a serious omission, for the quality

of vesicular resonance is very characteristic, and cannot be obtained except by percussing over lung vesicles.

The author makes a mistake, we think, in comparing for purposes of diagnosis two different regions on the same side of the chest, instead of the same regions on opposite sides. In the section on the Relations of Percussion to the Normal Thorax, after stating that in the infra-clavicular region the percussion sound is louder than anywhere else on the thorax, he says, immediately below, that if the sound in the fossa supra-clavicularis seems dull in comparison with that in the infra-clavicular region, the former must be considered in an abnormal state. This latter statement is certainly erroneous. In a large majority of healthy chests there is dulness in the region above, compared with that below the clavicle.

The chapter on Auscultation of the Respiratory Organs occupies only thirty-six pages. In the beginning is the following careless statement:—"The sounds perceived over these organs are divided into respiratory sounds, produced by the passage of the air along the walls of the respiratory organs, and rattling sounds, or rhonchi, which are produced by the meeting of air and water in the air passages." It is manifestly improper to call all the adventitious sounds *rattling* sounds, and certainly much more so to say that they are produced by the meeting of air and water. The subject is then considered under the following heads:—(A) Respiratory murmurs—(B) Rhonchi—(C) Auscultation of the Voice—(D) The Frictional Rhonchi—(E) Auscultation of Coughing. The respiratory murmurs are divided into the (a) vesicular, (b) bronchial or loud, (c) indefinite, (d) expiratory murmurs, (e) the interrupted respiratory murmur, and are despatched in a dozen pages. We here see important omissions which would not have occurred, had the author set out with the intention of considering the auscultatory signs in the same way as those of percussion—viz., with reference to their intensity, pitch, quality, and duration. No mention is made even of a difference in pitch or quality between the inspiratory and expiratory murmur of health. To speak of the bronchial or loud respiratory murmur will be readily admitted to be erroneous, for it is often so feeble as to be scarcely heard, and immediately after the author himself says "the sound appears loud or weak."

Division (c) includes every respiratory murmur not purely vesicular or bronchial.

It includes what we formerly knew as "harsh," more recently as broncho-vesicular, and also *one variety* of cavernous respiration. We like the term indefinite for those respiratory sounds whose character is indefinite, but we also like the term broncho-vesicular for that respiration where both the bronchial and vesicular qualities are so evident to the ear. There is no doubt in our own mind that a large cavity with flaccid walls does give us at times a respiration which we can properly call cavernous, and which is characteristic, viz., a hollow, blowing sound (not tubular) of low pitch, with an expiration lower in pitch than the inspiration. There is nothing vesicular and nothing tubular in the quality of this sound. Dr. Flint insists strongly upon these characteristics of cavernous respiration, but they are also recognized by Walsh, Barth and Roger, and Da Costa. Division (d) seems inappropriate, as the expiratory murmur cannot well be considered as a separate respiratory sign, but as one act of all the respiratory murmurs. In the section on râles is considerable bad nomenclature; e. g., sonorous râles are called *rattling*, and the term *vesicular crepitation* is applied to moist râles produced in cavities and bronchi, as well as in the air cells. At the top of page 69 nervous asthma is made synonymous with acute dry catarrh, a synonymy which probably few of our readers will be prepared to accept.

The explanation of the mechanism of the minute vesicular crepitation is accorded to Wintrich. This explanation (viz., by the sudden dilatation of air cells and small tubes, which had become agglutinated), was first given by the late Dr. Edson Carr, of Canandaigua, N. Y., who in 1842 made a communication to the *American Journal of Medical Sciences* on this subject. Wintrich himself gave Dr. Carr the priority.

Chapter II. treats of the Auscultation of the Organs of Circulation. The auscultatory phenomena are divided into Tones and Murmurs. In the first eight pages of this chapter, by the gross carelessness probably of translator, or proof-reader, the term *murmur* is employed seventeen times where *tone* should have been, which of course makes nonsense of the text. On p. 116, line 11, the sense is spoiled by the substitution of the word *tone* for *murmur*. The same thing occurs from the improper use of the word *murmur* in the third line of p. 125. The term sound is frequently substituted for tone, which, as a division of the auscultatory phenomena has been made into tones

and murmurs, and nothing has been said about sounds, is likely to confuse a young student.

In speaking of the tones it is said they are always loudest over the apex, implying that both are loudest here, when certainly the second tone is loudest over the base of the heart, and at the bottom of p. 94 it is so stated.

The author gives it as his opinion that the first sound is caused wholly by the closure of the auriculo-ventricular valves; why he calls these *venous* valves we cannot imagine. Such statements as the following are likely to mislead and confuse the mind of the student. "The sounds also frequently show deviations from their healthy condition, which, however, may not amount to abnormal murmurs." No deviation of a heart-sound ever amounts to a murmur. A murmur is a new sound altogether, not a modification of one there before, and the expression "*abnormal murmurs*" is bad, for there are no *normal* murmurs.

Farther on, also, we find two sections headed "*Diastolic Abnormal Murmurs*" and "*Systolic Abnormal Murmurs*." On p. 104 the author accounts for the weakening of the aortic second sound in cases of mitral insufficiency in the following manner:—"When the cusps of the mitral do not close, less blood passes into the left auricle; and hence during systole there is less blood thrown into the aorta." Such a statement is absurd. Less blood is sent into the aorta, because a part of what was in the left ventricle goes back into the left auricle, and the left auricle receives *more* blood than it was intended to contain; hence its dilatation is the first pathological sequence of mitral insufficiency.

Traube's method of dividing diastolic murmurs into two kinds is adopted. (1) "*The simple or pure diastolic murmur* is separated from the preceding and succeeding systole by a distinct pause; "it is heard (a) in case of insufficiency of the aortic valves," &c. "(b) The pure diastolic abnormal murmur appears if there is perforation of the mitral valve, even when the blood flows with unimpeded current. In diastole the blood flows not merely through the left auriculo-ventricular opening, but also through the perforation into the left ventricle; from the latter current the murmur arises."

(2) "*The modified diastolic abnormal murmur*. This murmur blends with the succeeding systolic tone without interval, either oc-

cupying (a) the whole diastole, or (b) appearing only at the close of diastole. In the second case the diastolic murmur appears as if it were a premature stroke of the systolic tone. On this account many have denoted it as a *presystolic* tone." The pure diastolic murmur, as it is called, must occur very rarely at the mitral orifice. The current of blood from the auricle to the ventricle is not usually strong enough to create a murmur until auricular contraction takes place, which is at the end of diastole. The author seems to admit this (i. e. the infrequency of the pure diastolic mitral murmur), when a little further on he speaks of the importance of a diagnosis between aortic regurgitation and mitral obstruction, whose murmurs do not occur at the same time. He says nothing of the danger of confounding 1 (a) aortic regurgitation with 1 (b) perforation of the mitral valve, whose murmurs, according to the author, occur in exactly the same time.

On p. 116 the author says:—"But if the current from the auricle into the ventricle is weak, then neither normal nor abnormal sound is to be heard." The passage of blood from the auricle to the ventricle normally produces no audible sound.

The meaning of the following, to be found on p. 125, is far from being clear. "In this case [stenosis of the left auriculo-ventricular opening] a diastolic murmur may be felt, extending from the apex of the heart to the nipple, *arising from accompanying insufficiency of the mitral valve*; in rare instances a systolic murmur results from the same cause."

The book closes with short sections on Arterial Sounds, Auscultatory Phenomena in Aneurisms and Veins, and Pericardial Murmurs. As an example of the positive manner in which the author makes statements entirely contrary to commonly received opinion without as much as hinting that there is any difference of opinion, we would call attention to p. 135, where it is stated that "the heart always occupies the lowest part of the pericardium distended by fluid."

There is also an Appendix of fourteen pages on the Apex Impulse. The rebounding theory of Gutbrod and Skoda is claimed to be "the only one which readily explains all the phenomena of the apex impulse."

We have commented on the book as it appears in English. Of course some of our remarks would not hold good for the original. In this dress we should not recommend it to those not well acquainted with

auscultation and percussion. There is always an objection to a translated text book, for it is often next to impossible for the best of translators to express the exact meaning of an author. Besides this there is in this book altogether too much theory for young students, who want rather clinical facts. For a text book it is not sufficiently systematic, nor is the space well divided among the different topics. Very important subjects are either altogether omitted or but lightly touched upon, while undue prominence and space are allotted to minor topics. An author should not allow himself to digress upon any subjects in which he may be particularly interested, when engaged upon a comprehensive work in which each topic should have space according to its practical importance. Moreover, in this edition careless statements, typographical errors and obscure passages abound.

It may perhaps serve a good purpose in calling the attention of physicians to the assiduous efforts of Skoda, Traube and others, to determine the manner of the production of the signs obtained by percussion and auscultation, according to established laws of physical science. K.

Medical and Surgical Journal.

BOSTON: THURSDAY, JANUARY 6, 1870.

A NEW YEAR'S GREETING.

ACCORDING to the arrangement of the publishers of this JOURNAL, announced some months since, a new volume now for the first time begins on the opening week of January instead of February. We embrace the opportunity of wishing our readers a Happy New Year, while we thank them and our contributors for their indulgence during the past year. Though the many able pens of our medical brethren have not sufficiently often illustrated the correlation of forces, by converting the heat of thought into scriptorial motion, it is yet owing to what they have so kindly done for us that we have been enabled to increase the density of our issues. Subscribers have thus been doubly indemnified in quantity of type for the month nominally omitted from the volume which terminated with the year 1869.

It is with great satisfaction that we place

upon the title-page the name of H. H. A. BEACH, M.D., as Assistant Editor. Dr. Beach has in fact acted in that capacity for a number of months, and in a manner which has left nothing to be desired.

THE EMPLOYMENT OF ERGOT OF RYE IN PARTURITION.

As the old fable had it, the contest was as to the material of which the shield was made. The combatants were both right. Each bore truthful testimony to what he had seen. One had viewed the golden side; the other the silver surface. Neither had looked at both sides.

So it often is with medical observation. One meets with sixty or a hundred cases of a certain class, and from them as data deduces a certain result. Another has had sixty or a hundred cases of the same class, which present some different phenomena from the before mentioned, and reasons with equal logic to the opposite conclusion. The two sets of facts should be put together, and hundreds of others, perhaps added, and then an adequate basis for an opinion may probably be obtained. Thus it has been with the question of re-vaccination, and thus it is with that of the administration of ergot in labor. Relative to this latter topic we propose to get a glimpse of the two sides.

Some practitioners use the spurred rye with great freedom, certain of them being in the habit of anticipating the occasion for its use, and carrying the drug with them to their patients who are to be confined. Twenty grains are employed by one, thirty by another. All are presumed to select cases which are not unsuitable for its exhibition. These obstetricians find that it merely strengthens insufficient uterine contractions, without abolishing the intermittent character, and detect no accidents attributable to its action upon mother or fœtus. Great stress is sometimes laid on the importance of giving just enough and not too much.

Dr. Uvedale West, Vice President of the Obstetrical Society of London, was quoted in the *Lancet* of July 20th, 1861, as saying that in 1855 he had published the particulars and results of sixty-nine cases in which

he had administered the ergot of rye, and in which 9 children were still-born—viz., 2 putrid at birth; 2 born after labors preceded and accompanied by hæmorrhage; 1 born footling with hydrocephalic head and consequent compression of funis; 1 in which there was evidence of latent compression of funis; 1 a difficult primiparous forceps delivery; 1 a difficult vectis delivery; and 1 born dead without any assignable cause. These results were considered favorable to the drug by Dr. West; unfavorable, by some critics.

Between Dec. 23d, 1855, and June 22d, 1861, Dr. W. gave ergot in 172 cases, including one case of twins, thus involving 173 children. Of these 173, 5 were still-born, viz.: 3 putrid at birth; 1 with placenta prævia and profuse hæmorrhage—premature; 1 with prolapsed funis.

"On the whole number of births," says Dr. West, "1013 labors, and 1029 children born, including the series without ergot as well as that with ergot, there were 50 still-births; of which 5 were born dead without any manifest cause. So that, inasmuch as only 1 of those 5 was born under the influence of ergot, that medium having been given in the greater proportion of 1 in $4\frac{1}{2}$ of the whole number of labors, the author thought there was no sufficient evidence in the facts he had accumulated to justify the doctrine that ergot of rye was dangerous to the life of the child."

We leave Dr. West to speak for himself in the following summary:—

"The author concluded his paper with the observation that the tables before the society appeared to prove that it was immaterial in what stage of the labor the medicine was given; whether the os uteri was rigid or supple; whether the liquor amnii was or was not evacuated; or whether the mother was multiparous or primiparous; but that it was essential that actual labor should be present, as well as that the accoucheur should be competent to meet any emergency that might arise, just the same as when ergot has not been given; that ergot was useful wherever it was desirable to improve uterine action; and that it could be dangerous only where uterine action would be dangerous, as, for example, in a case of arm presentation after the liquor amnii was evacuated, as then it would make turning more difficult."

On the other hand, it will be remembered
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that Prof. Huston said that in his experience the parturient women subjected to the influence of the drug gave birth to children "stillborn in a proportion shocking" to his feelings. "In the city of Philadelphia, where it is so much praised by many distinguished men, this item in the bills of mortality has become so glaring as to attract the notice of the editor of one of our daily papers." This was in 1829.

From a summary of cases given by Dr. Hardy (*Dublin Journal*, vol. xxvii. p. 224), it appears that in 48 instances where the ergot of rye had been given, 34 children were stillborn.

Dr. Ramsbotham says:—

"After a great number of trials I observed that although the mothers recovered as well as if through an ordinary labor, their systems not being in any sensible degree injuriously affected by the drug, yet that the proportion of children stillborn was greater than when the membranes were punctured. This I attributed to the baneful influence of the medicine upon the fœtus." Dr. Ramsbotham modified his practice in consequence.

"Dr. Trask," says Dr. Robert Barnes (*Lancet*, Nov. 26, 1853), "who analyzed the histories of all the cases he found recorded, found that in a large proportion ergot had been given. It is quite true that in many of these cases the ergot was given in contravention of the rules usually laid down. In some there was obstruction to the labor from distortion of the pelvis, malposition or mal-proportion. But this consideration does not diminish the value of the general fact, that ergot has frequently caused rupture of the uterus. If given before the head has descended into the pelvis, who can determine, even in the case of a well-formed pelvis, that an obstacle will not arise in the unusual or morbid enlargement of the head? If given even when the head is pressing on the perineum, the os perfectly open, and all those conditions apparently present which are held to justify the resort to ergot, who can tell whether a second or a third child may not be behind? And who would knowingly goad the uterus into spasmodic fury in case of twins? How great is the probability that the second child would be driven into the pelvis in a transverse position?"

Dr. Barnes (*op. cit.*) goes on to say:—

"Drs. Hardy and M'Clintock observed that the pulsations of the fœtal heart un-

derwent a similar diminution in frequency to that witnessed in the mother, and that this was succeeded by irregularity and intermission, and that it became *inaudible*. Dr. Hardy, Dr. Beatty, and others, after careful observation directed to this point, assert, that unless the child be born within a limited interval from the administration of the drug, it will be stillborn. The excessive mortality of the children in ergotic labor is a fact well established, although disputed by some practitioners enthusiastic in the praises of ergot. The Prefect of the Seine had observed an almost regular annual increase in the number of stillborn children, and he was informed that in a large number of these cases ergot of rye had been given during labor. He put the following question to the Academy of Medicine—"What may be the influence of ergot of rye on the lives of infants, and on the maternal life?" The report made by a commission of the Academy, consisting of Orfila, Adelon, Villeneuve, Méral and Danyau, contained the following conclusion:—"Ergot of rye administered improperly causes death to the fetus, and injury to the mother." The immediate source of danger to the fetus is either the toxic property imparted to the blood, or the interruption to the circulation through the uterus and the placenta, occasioned by the long-continued contraction of the uterus. In this latter case the child may perish from asphyxia. These are the usual sources of danger; but there is a third. The long-continued and violent pressure to which the child is subjected during ergotic labor may compress the brain beyond the limit of endurance, or it may impede the circulation through the umbilical cord."

Dr. Ramsbotham again says:—

"It has happened to me in four different instances to witness the death of the fetus, a few hours after birth, by convulsions, after the induction of premature labor by ergot."

The theoretical objections to the employment of ergot in parturition, we have now seen more strongly put than by Dr. Meigs in the following passage:—

"A labor is effected by the contractions of the muscular fibres of the womb, aided by that of the abdominal muscles. If all the powers employed in a labor could be accumulated in a single pain, lasting as long as all the natural pains do, no woman probably could escape with life from so great an agony, except that small number who are met with, and whose organs, hap-

pily for them, make no resistance, but open spontaneously like a door, to let the fetus pass out. By a beneficent law of the economy, the pains of labor are short, not lasting more than thirty or forty seconds in general, and returning once in three to six minutes. Under such pains or contractions, however powerful, the fetus is safe; for as soon as the contraction is over it lies in the womb free from pressure, and the placenta, which during the contraction had been violently compressed betwixt the womb on which it lies and the child within the cavity—that placenta, I say, recovers its circulation, and continues during the absence of the pain to perform all the bronchial offices which belong to it. But," he continues, "if an ergotic pain is produced to last thirty minutes, in a case where the placenta is on the fundus uteri, and to be jammed for thirty minutes against the child's breech without an instant of relaxation, who can doubt that its circulation is either wholly or nearly abolished; and that when the child emerges at last from the mother's womb it will emerge quite dead or in a profound asphyxia from the long suppression of its placental circulation? Multitudes of children are born dead from this very cause, by the imprudent exhibition of a medicine which as certainly excites a spasm of the womb as nux vomica does that of the other muscles of the body. For my own part," he adds, "I could say that I scarcely give ergot as an expulsive agent; I chiefly employ it at the moment of, or just before the birth of the child, in order to secure, if possible, a permanent and good contraction of the womb after labor in women who are known in their preceding labors to have been subject to alarming hæmorrhage."

On the first side of the question again it is urged, first, that the injurious effects ascribed to ergot might have occurred from pressure, even if the drug had not been used; secondly, that they are often owing to its use too early in labor; thirdly, that the delay of tedious parturition may sometimes be more dangerous than interference by the judicious employment of the agent under consideration.

Thus, we have statistics opposed to statistics—theory opposed to theory. Each one must judge or suspend judgment for himself, according as his understanding be convinced or left in doubt. For ourselves we adopt the following maxims:—In contemplating the use of a drug, we should

take ground that the "antecedent presumption" is against any interference with nature—a presumption, however, liable to be overthrown on due cause being shown. This presumption is strengthened when we find practitioners whom we know to be careful observers, and of vast experience, opposed to the administration of a drug from close watching of its behavior in their hands, both in cases favorable, and in those unfavorable in their termination.

As to the employment of ergot, after or just before, the second stage of labor is completed, for the purpose of controlling hæmorrhage, all, we believe, claim for it great value.

M. LORTET'S ASCENT OF MONT BLANC.—Two ascents of Mont Blanc were performed last summer by Professor Lortet, of Lyons. Before making these ascents he was somewhat incredulous as to the reality of the existence of that disturbance of functions known as *mal des montagnes* or mountain sickness, believing that the imagination had more to do with this effect of rarefied air than travellers chose to admit. Frequently ascending Mount Rosa to the height of 4300 metres without undergoing the slightest inconvenience, he felt sceptical as to the effect of the additional 500 metres. The experience of these ascents has, however, convinced him of the reality of the occurrence. The nausea, breathlessness and somnolence attendant upon this last portion of the ascent left no doubt as to the reality of the suffering produced by the rarefied atmosphere. The summit once reached, all ill effects subsided, except the breathlessness caused by any exertion. One of the party vomited the whole time, and on examination his temperature was found reduced to 32°C. under the tongue, the pulse being rapid and powerless. Leaving aside M. Lortet's graphic description of the ascent, we may cite the principal results of his observations. 1. As regards *respiration*, he found the number increase from 24 at Lyons and Chamonix to 36 at the summit of Mont Blanc, the breathing being very short and oppressed even when quite still, and the slightest movement inducing breathlessness. After two hours' rest these effects gradually diminished, the respiration descending to 25, but always remaining painful. Traces were taken by the anapnograph, and from these it appears that the quantity of air inspired and expired on the summit is much less, and the duration of

the inspiration as compared with that of the expiration is much shorter. The quantity of air inspired is very small, and as this is submitted to a very low pressure, the amount of oxygen brought in a given time in contact with the blood is necessarily very small. 2. *Circulation*. Although the ascent was performed very slowly, the pulse rose in an extraordinary manner, mounting up progressively from 64 to 136, and at the final effort to 160. The vessel seemed almost empty of blood, the slightest pressure arresting its course. During the last 300 metres the veins of the hands, arms and temples were distended, the face being pale and somewhat cyanosed. All the party, including the guides, experienced the heaviness and somnolence, often very oppressive, due probably to a stasis of venous blood in the brain or to defective oxygenation. After two hours' rest at the summit, the pulse still continued to beat between 90 and 108. Numerous sphygmographic traces are given, not only exhibiting the conditions of the pulse in M. Lortet's person, but also in that of Cupelain, one of the most experienced of Alpine guides. Although in him the *mal des montagnes* exhibits itself by no remarkable symptoms, the sphygmograph indicates that he nevertheless is subjected to functional disturbances. The sphygmograph applied under these circumstances exhibits curves having an exact resemblance with those termed by M. Marey "*courbes d'algidité*." The pulse is so wretchedly small that the spring of the instrument is scarcely raised. This alone would indicate a general cooling of the body, the reality of which diminution of temperature has otherwise been shown. 3. *Temperature*. This was carefully taken at various altitudes by placing a Walferdin thermometer under the tongue. While walking the diminution of temperature was very remarkable, and proportioned to the altitude attained. M. Lortet's temperature, from being 36.3°C. at Chamonix, descended gradually as he mounted up, until at the summit it had become as low as 32°. When in a state of immobility, however, it remained at 36°, as at Chamonix. During the muscular effort necessary for climbing the temperature may descend by 4° or even 6°C., which is an enormous descent; but after a few minutes' rest it regains nearly its normal point. At the summit as long as half an hour is required before the readjustment takes place. Since his return to Lyons, M. Lortet has found that the rapid ascent of the moderate hill which overhangs that town suffices to raise the temperature from three-tenths to

seven-tenths of a degree. These observations apply, however, only to climbing while *fasting*, for, notwithstanding the efforts required if these be performed during the digestive process, not only will the 38° be maintained, but a rise to 37.3 may be noted. About an hour after the meal the body again loses its temperature under muscular effort. The chilling M. Lortet explains by the large amount of caloric which under the efforts incident to climbing is transformed into muscular force—an amount which the economy is only just able to furnish. Although the body may be burning, and covered with sweat under the exertion of mounting, it yet loses heat, and frequent halts are necessary for the regeneration of this. It is, in fact, but another exemplification of the law developed by Meyer, Joule, and Tyndall, that heat and motion are but different modes of action of the same force. M. Lortet suggests that this loss of heat ceases during digestion, probably on account of the acceleration of the general and capillary circulation, and also from the extreme rapidity of the absorption of the aliment. This explains the custom of the guides insisting upon eating about every two hours, but unfortunately, after 4500 metres have been attained, the loss of appetite becomes so great that even a few mouthfuls are swallowed with difficulty.—*Medical Times and Gazette*.

NOTES ON SOME CASES OF ERYSIPELAS. By JOHN W. MARTIN, M.D., M.Ch.—In the following remarks, I merely wish to record the observation of a few points which, I think, are possessed of some interest.

During the last eight months, three well-marked cases of erysipelas of the head and face have come under my notice, the subjects being all persons in the poorer ranks of life, two of them women, and one a young man.

CASE I.—Mary K., *æt.* 45, wife of a laborer; the attack commencing six weeks subsequent to her confinement.

CASE II.—Mary M., *æt.* 35, wife of a factory laborer, and mother of nine children. Has always been delicate, and during the three months preceding the attack had to give up work.

CASE III.—Maurice D., *æt.* 22, factory operative; unmarried.

In all, the form of attack was phlyctenoid; there was a period of *latency* for a week before the appearance of the eruption, as marked by languor and a general feeling of "*malaise*," and the attack itself

set in with the usual symptoms of nausea, vomiting, pain in the back, loaded tongue, quick pulse, and confined bowels. In all, the glandulæ concatenatæ were painfully swollen and tender, accompanied by a feeling of stiffness in the neck.

The most careful inquiry into the cases of the two women could elicit *no history of lesion of any kind* from whence the attack might have had its starting point, thus forming exceptions to what Trousseau, in his excellent chapter on erysipelas, states to be almost universally the rule.

In the case of Maurice D., there was sore throat accompanying, but not, as far as I could learn, preceding the attack; but there was *no lesion* in the neighborhood of the brow, eye, cheek or ear, where the blush first exhibited itself.

In each of the cases the climax, as shown by thermometrical observations, was reached at periods varying from the sixth to the eighth day, the highest temperature varying from 101 one-fifth degs. to 101 three-fifth degs.

In all, at the point where convalescence was becoming thoroughly established, there was a fall in the temperature several degrees below normal, varying from 94 one-fifth degs. to 97 four-fifth degs., the most careful observations being made to establish these temperatures.

A similar fall in temperature, before the establishment of convalescence in febrile disease, has been observed and recorded in some thermometrical observations made by my father, during an epidemic of typhus fever that occurred in Portlaw in the winter of 1866, and the spring and summer of 1867.

In all, chemical examination of the urine showed the *presence of sugar*; in the case of Mary M., the test for uric acid was followed immediately by a copious precipitate, its presence being confirmed by the microscope. I am sorry to add that I omitted this test in the other two cases.

The treatment in all cases consisted in dusting the part affected well with flour, the exhibition of mild aperient medicine, of muriate tr. of iron and wine *Æiv.* daily, the patients being given as generous a diet as possible.

The points of interest seem to me to be:—

1st. Is there a true period of latency culminating in the febrile symptoms usually preceding the eruption? or, are the febrile symptoms dependent on the engorgement, tenderness and accompanying constitutional disturbance set up in the neighbor-

ing glands, by the presence of a lesion of some kind or other, from whence, according to Trousseau, the eruption takes its starting point?

2d. Is there in all febrile diseases, as a rule, a fall in temperature below normal before convalescence is established?

3d. Is sugar usually present in the urine of erysipelatos cases?—*Dublin Medical Press and Circular.*

MONSTROSITY—UNPRECEDENTED PRESENTATION.—From a paper read before the Nashville Medical Society, by Wm. B. Maney, M.D., and published in the *Nashville Journal of Medicine and Surgery*, we make the following extract:—

On the 26th of August, between one and two hours after noon, I was called in haste to see Mrs. J., a stout, healthy Irish lady, aged 28, the mother of five children, three of whom are now alive.

On entering the room, I found the patient and female attendant very much frightened at a considerable hemorrhage that had occurred a short time previous. The midwife informed me that she had been in attendance on Mrs. J. since about ten o'clock, P.M., of the 25th; that the pains had been slow and feeble; that about an hour before my arrival the waters had broken, and were followed immediately by considerable flooding; that being unable to detect any portion of the child after the evacuation of the waters, she had sent for me.

Upon inquiry of my patient, I was informed that all her previous labors were very slow and tedious, but she was delivered without the intervention of instruments, and without any serious consequences, or any inconvenience save the great length of the labors.

Upon examination, I could plainly detect the occiput in the left acetabulum, with the right hand resting on the left side of the head, some distance above the ear. The parts were in a favorable condition, nor could I detect any cause for the hemorrhage that had so frightened my patient and her attendant.

Seeing no reason why the labor should not soon be terminated, save the slowness and feebleness of the pulse, I ordered wine of ergot \mathfrak{ss} , and administered it in tablespoonful-doses, at intervals of fifteen minutes, at the same time trying to assist the action of the medicine by irritating the womb with my fingers. Soon after taking the third dose of ergot, my patient had

quite a hard bearing-down pain, followed almost immediately by quite a gush of blood, sufficient to cause her to faint. On her revival, the ergot was given freely, the pains increasing in frequency, but with little increase of force. The flooding, however, ceased; nor was there any more hemorrhage during the labor.

On a second examination, I found the same state of affairs as at first, save the hand had retrograded a little, and the head had somewhat advanced. The ergot was continued, and on again making an examination, I was greatly surprised to find the hand protruded, and the head nowhere to be found in reach of my finger. Being unable to replace the hand, my next resource was to turn the child and bring the feet down; and as my patient complained of great pain and soreness of the womb, I ordered ether \mathfrak{zvi} , and administered it freely, with a most happy effect.

While fully under the influence of the ether, I passed my hand within the womb, and fortunately found the feet but little above the mouth. Taking them both within my hand, I endeavored to bring them down, but with all the force I could bring to bear, I could move them but little. The slight movement, however, enabled me to replace the hand, and now having the feet presenting, I determined to leave the rest to nature.

At the expiration of probably nearly an hour, I again made an examination, and was astonished to find the feet, head and one hand within the superior strait; the feet behind the pubis, the hand between the feet and head—the latter crowding both feet and hand into the cavity of the pelvis.

Seeing that instruments would be necessary to end the labor, I sent a note to Dr. Briggs, requesting his attendance, and then sat patiently to work, endeavoring at each successive pain to push up the feet and hand and give the head a chance. The hand was replaced with much difficulty, but little or no progress could be made with the feet. About dark Dr. Briggs arrived, and I informed him of the state of affairs.

Upon examination, Dr. Briggs found the presentation as last described, save the hand had again come down. After something over an hour's work, the head was sufficiently cleared to introduce the forceps, and Dr. Briggs delivered the head with but little trouble or delay. Laying aside the instruments, he finished the delivery of one of the most singular freaks of nature that I have ever witnessed. The head, arms

and chest were well formed, and of natural size. The abdomen was void of skin and muscle, and covered by the peritoneum alone. The inferior extremities—of good size and well proportioned except the left, ending in a club foot—started out a short distance below the superior extremities, and in place of the buttocks was a dark colored tumor, somewhat larger than the head—to which the cord was attached. Neither genital organs nor anus could be discovered.

COMPOUND FRACTURE OF THE PATELLA—RECOVERY. By J. P. ALDRIDGE, M.D., F.R.C.S.—On Christmas morning last I was called to a woman, aged 53, who had sustained a severe injury. On arriving, I found a transverse fracture of the patella, with a wound laying open the cavity of the knee-joint, and extending round the knee on either side as far as the outer and inner boundaries of the popliteal space. The leg lay in a flexed position, exposing the cavity of the joint, but the lateral ligaments were not ruptured. Part of the fractured patella protruded through the wound; there was considerable hemorrhage, but not requiring the tying or acupressing of any vessel. I may here mention that the patient had inflammation of the joint, with deep-seated abscesses in the thigh, some years before, which resulted in partial stiffening of joint.

On the morning above named she was proceeding upstairs in the dark, and fell stumbling down two steps, her leg doubling under her. She states her knee struck on one of the steps, which caused the mischief; but probably the violent doubling of the leg caused the contracted muscles of the thigh to bear violently upon the patella, the ligamentum patellæ resisted, and the bone gave way. Be that as it may, the injury was severe, and one requiring no small consideration. After careful examination, I resolved to try and save the limb, so, with the aid of my assistant, Dr. F. W. Smith, replaced the parts into their proper position, and brought the edges of the wound together by means of silk sutures and adhesive plaster. The parts were most accurately and carefully adjusted, a few turns of a bandage placed around the thigh to prevent muscular contraction, as also over the calf of the leg. I laid the knee in a pillow-splint, raising the leg a little. At noon the same day found her very restless, and administered an anodyne, which soon composed her, and she expressed herself easy, and slept several hours.

26th.—Still quiet; no fever; pulse 79.

27th.—Slight constitutional disturbance; pulse 84.

28th.—More composed; had a good night.

29th.—Removed sutures and applied more strapping; found the whole extent of wound united by first intention, and skin natural and cool. Left the knee exposed to the air and covered lightly with a fold of blanket placed over a cradle.

Since then, recovery has been most complete, and without the slightest constitutional disturbance, free from pain, and enjoying good rest; to use her own words, "I have been quite easy, Sir, ever since you took out the threads."

A month after the accident the patient could sit up, and in six weeks, with some assistance, walked into another room.—*Medical Times and Gazette.*

BOSTON LUNATIC ASYLUM.—(From Mayor Shurtleff's Inaugural Address, Jan. 3, 1870.) During the past year alterations have been made to add temporarily to the security, safety and comfort of the inmates of the Lunatic Hospital, and to give accommodations to the continually increasing number of patients. Nevertheless, the hospital remains in the same crowded condition in which it has been for the last few years, the number of the patients being more than two hundred; and in several of the rooms ten or twelve persons are huddled together, to the great injury of health, and with a risk of personal harm to the inmates, notwithstanding the good and constant watch that is kept over them by the kind and careful attendants. This disgraceful state of things can never be satisfactorily overcome until suitable provision is made for these unfortunate beings by the erection of a proper building, wherein they can be humanely taken care of, in a manner that will comport with the notions of the city in all its matters relating to the care and management of its eleemosynary institutions."

His Honor does not tell us how crowded the present Lunatic Hospital would be if it contained no patients but those who had their domicile in Boston. It would be interesting to know this, because there is a discrepancy between the Mayor's statement as to "this disgraceful state of things," and that of Mr. George B. Emerson in a late communication to the *Advertiser*.

Again, if a new building be indeed required, does His Honor really mean to say that the insane poor cannot be humanely taken care of in a building erected by the

State of Massachusetts; and to imply that "the notions of the city in all its matters relating to the care and management of its eleemosynary institutions" are vastly superior to the notions of the Board of State charities? We entertain some curiosity on this point for a special reason.

THE WINTHROP HOSPITAL PROJECT lies stranded on a point of order. The *Advertiser* says, "After a spirited discussion of an hour or more, it was discovered that the plans and estimates were not before the Council, and the matter was suffered to drop. After the crushing reasons which were brought against it, there is small chance that it will rise again."

OUR thanks are due to Messrs. Appleton & Co. for a copy of the finely executed steel engraving of the late Dr. John W. Francis, which they publish and dedicate to the medical profession of the United States.

THE SURGEON-GENERAL OF THE COMMONWEALTH.—In this paper, designed to call attention to an enterprise which shall give us means to aid our sick and wounded comrades, it is eminently appropriate that we should remember one, who in time of war contributed so largely to the honor of our State, and to the efficiency of our troops in the field. We refer to Surgeon-General William J. Dale.

From the beginning, through the long, gloomy months of the rebellion to its glorious end, no officer was called upon to perform more varied and trying duties. In selecting regimental medical officers, in hurrying to the field additional assistance, after our great battles, in facilitating the furlough and discharge of the sick and wounded, in answering the importunate calls for information after each action—he displayed that rare combination of judgment and decision, which gained for Massachusetts the deserved reputation of excelling all other States in interest and care for her sick and wounded.

At the close of the war, when the State made provision for the relief of those disabled in service, and for the families of our dead comrades, he gave to the difficult questions submitted to his decision, the same earnest attention and ripe judgment which characterized him during the war. While he had no mercy for the skulk and impostor, the really deserving found in him

a help and a friend. For the clear-headed, warm-hearted old General, the soldiers of Massachusetts will always entertain feelings of profound respect and friendship.—*Dress Parade.*

DEATH OF A RESPECTED PHYSICIAN.—Dr. Thomas R. Boutelle, one of the oldest and most esteemed physicians of the State, died at his residence in Fitchburg, July 13th, 1869, after a long illness. Dr. Boutelle was born in that town June 9th, 1795. He received a liberal education, studying medicine with Dr. Peter Snow, father of the present physician of that name, and receiving his medical degree from the Yale Medical School. He first practised medicine in New Braintree for some years, and afterwards removed to Leominster, and from thence to Fitchburg, where he continued the practice of his profession up to the time of his last sickness, a period of over thirty-six years, being at that time the oldest practising physician of the town. In his profession, Dr. Boutelle took high rank as a careful and conscientious physician. As a man and a citizen he was most highly esteemed and respected by his fellow-citizens, for his perfect integrity and uprightness of character. Always a firm supporter of every cause of benevolence or freedom, he gave liberally of his means for their support, and his death will be widely mourned.

DEATHS FROM CHLOROFORM.

AUG. 22d, a boy, aged 12, with a dislocated hip, inhaled chloroform from a handkerchief, twenty or thirty drops at a time. "The operators had been pulling at the ropes when it was noticed that the pulse was failing and the boy died immediately. He had been under the influence of the chloroform about twenty minutes, and two drachms had been given."—*Druggist.*

NEW YORK, NOV. 1, 1869.

MY DEAR DOCTOR:—I am informed, on reliable testimony, that a woman died from the administration of chloroform on the 26th or 27th of October last, at Cora, Crawford County, Pennsylvania. She had taken chloroform, administered by a dentist, to have some teeth extracted. As it is doubtful if this case will be given to the public, and as I know you are seeking light on this subject, I send the facts to you as I have received them. I know nothing more of the case, not even the names of the parties.

Very truly yours, FRANK H. HAMILTON.

G. S. DUNSTER, M.D.

New York Medical Journal.

Medical Miscellany.

LADY DOCTORS.

O doctors grave of Saville Row,
You'll need your boasted knowledge;
The girls are coming up, you know,
To pass the Hall and College.
Oh! M.R.C.S., or M.D.,
Your glory now *sic transit*,
And there's a howl of agony,
Reechoes from the Lancet.

How strange to hear from woman's lips
That queer prescription Latin,
To think diseases should eclipse
Her love of silks and satin!
She'll have all mortal ailments pat,
Diphtheria, agues quartan,
Prescribe in Mother Hubbard hat,
And cross-cut frills of tartan.

And when a suitor's ardor burns,
She'll know when bending o'er him,
The "Sterno-cleido-mastoid" turns
With good effect before him;
But fatal to a lover's bliss
Such anatomic lore is,
When girls can pout to meet a kiss,
"Orbicularis oris."

Ah, me! a patient's cheek would glow,
Where'er a soft white finger,
Upon his pulse's ebb and flow
In doubt should chance to linger.
And when the Doctor did depart,
That medical deceiver
Would leave within the patient's heart,
Love's intermittent fever.

And when the fated hour has come—
From which the Saints defend us—
And we're obliged to stay at home,
With "Haustus stat: sumendus,"
There's one thing may console a sage,
When that last journey's certain—
A fair hand leads us off the stage,
And drops the final curtain.

O husbands! ye who love your wives,
And prize domestic blisses,
A source of sorrow all your lives
A Surgeon-wife like this is;
You hear the night-bell's clanging sound,
It tells some patient worse is,
I own you have a decent ground
For truly British carcases.

O maidens! there is work to do,
A duty still diviner
Than healing must devolve on you,
Whose clay God fashioned finer,
However well you play your parts,
The Surgeon's skill revealing,
You'll learn in soothing aching hearts
A truer task of healing! [Eng. Exchange.

A NEW PUBLICATION.—The first number of the *American Journal of Syphilography and Dermatology* has come to hand. It is edited by W. H. Henry, M.D., &c. &c., and makes a fine appearance. Publishers, F. W. Christern, N. Y., and Lindsay and Blakiston, Philadelphia.

NEARLY SWALLOWED HER TEETH.—A middle-aged lady in Detroit was suddenly seized with a vertigo and fell to the sidewalk. A physician found that she was being strangled in some manner. Investigation revealed the cause in the shape of a set of false teeth that had dropped from their

position as the head of the lady thumped on the sidewalk, and in her gaspings for breath had been drawn into the throat so far that she was with difficulty relieved.—*Canada Journal of Dental Science.*

WHAT BECOMES OF OLD SHOES.—They are cut up in small pieces, and these are put for a couple of days in chloride of sulphur, the effect of which is to make the leather very hard and brittle. When this is found to have been effected, the material is withdrawn from the action of the chloride of sulphur, washed with water, dried, ground to powder, and mixed with some substance which causes it to adhere together, for instance shellac or any other resinous material, or also good glue or thick solution of gum; it is then pressed into moulds and shaped into combs, buttons, knife-hafts, &c.—*Cosmos.*

TO CORRESPONDENTS.—Communications accepted.—Case of Triplets—Case of Tetanus—Case of Suspected Poisoning by Oxalic Acid.

BOOKS AND PAMPHLETS RECEIVED.—Forty-third Annual Report of the Officers of the Vermont Asylum for the Insane. August, 1869. Pp. 16.—Vick's Illustrated Catalogue and Floral Guide for 1870. Rochester, N. Y. Pp. 84.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending Jan. 1, 1870.

Cities and towns.	Number of deaths in each place.	PREVALENT DISEASES.— Consumption.	Febrina.
Boston . . . 106	21	9	0
Charlestown . 11	2	0	0
Worcester . . 13	4	0	0
Lowell . . . 16	1	2	0
Milford . . . 1	0	0	0
Chelsea . . . 8	0	1	0
Cambridge . . 9	2	0	0
Salem . . . 11	2	0	0
Lawrence . . . 7	1	0	0
New Bedford 17	5	1	1
Springfield . 9	4	1	0
Pittsfield . . 1	0	1	0
Fitchburg . . 5	1	2	0
Taunton . . . 11	2	0	0
Newburyport 8	4	1	0
Fall River . . 7	3	0	0
Haverhill . . 1	1	0	0
	241	53	18

Five deaths from measles, five from whooping cough, five from typhoid fever and six from scarlet fever are reported from all the above cities and towns.

GEORGE DERRY, M.D.,

Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending January 1, 1870, 106. Males, 58—Females, 48.—Abscess, 1—accident, 4—anaemia, 1—apoplexy, 3—disease of the brain, 4—inflammation of the brain, 2—bronchitis, 3—cancer, 1—consumption, 21—convulsions, 3—croup, 1—diarrhoea, 1—dropsy of the brain, 3—drowned, 1—epilepsy, 1—erysipelas, 1—scarlet fever, 3—typhoid fever, 1—gangrene, 1—disease of the heart, 5—homicide, 1—infantile disease, 3—intemperance, 2—disease of the kidneys, 2—disease of the liver, 1—congestion of the lungs, 3—inflammation of the lungs, 9—paralysis, 3—peritonitis, 1—premature birth, 3—puerperal disease, 2—purpura haemorrhagica, 1—rheumatism, 3—scalded, 1—scrofula, 1—smallpox, 1—disease of the stomach, 1—teething, 1—unknown, 3—whooping cough, 1.

Under 5 years of age, 31—between 5 and 20 years, 13—between 20 and 40 years, 23—between 40 and 60 years, 23—above 60 years, 16. Born in the United States, 73—Ireland, 23—other places, 11.